



SECTION – A (Q. No. 51 to 85)

51. On heating, some solid substances change from solid to vapour state without passing through liquid state. The technique used for the purification of such solid substances based on the above principle is known as

- (1) Crystallization (2) Sublimation (3) Distillation (4) Chromatography

Ans: 2

52. Match List I with List II.

List I (Process)	List II (Conditions)
A. Isothermal process	I. No heat exchange
B. Isochoric process	II. Carried out at constant temperature
C. Isobaric process	III. Carried out at constant volume
D. Adiabatic process	IV. Carried out at constant pressure

Choose the correct answer from the options given below:

- (1) A – IV, B – III, C – II, D – I (2) A – IV, B – II, C – III, D – I
(3) A – I, B – II, C – III, D – IV (4) A – II, B – III, C – IV, D – I

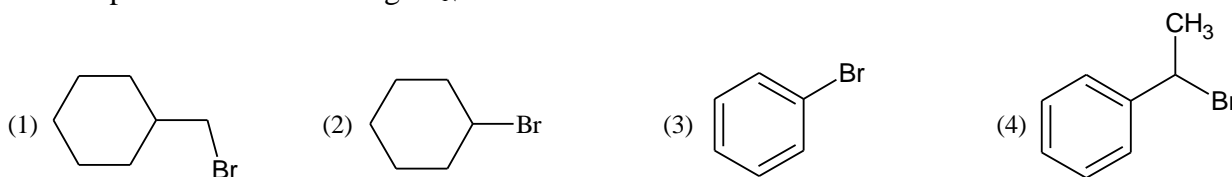
Ans: 4

53. In which of the following equilibria, K_P and K_C are NOT equal?

- (1) $\text{PCl}_{5(g)} \rightleftharpoons \text{PCl}_{3(g)} + \text{Cl}_{2(g)}$ (2) $\text{H}_{2(g)} + \text{I}_{2(g)} \rightleftharpoons 2\text{HI}_{(g)}$
(3) $\text{CO}_{(g)} + \text{H}_2\text{O}_{(g)} \rightleftharpoons \text{CO}_{2(g)} + \text{H}_2(g)$ (4) $2\text{BrCl}_{(g)} \rightleftharpoons \text{Br}_{2(g)} + \text{Cl}_{2(g)}$

Ans: 1

54. The compound that will undergo $\text{S}_{\text{N}}1$ reaction with fastest rate is



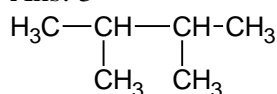
Ans: 4

Due to higher stability of secondary benzyl carbocation

55. A compound with a molecular formula of C_6H_{14} has two tertiary carbons. Its IUPAC name is:

- (1) n-hexane (2) 2-methylpentane
(3) 2,3-dimethylbutane (4) 2,2-dimethylbutane

Ans: 3



2,3-dimethylbutane



CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

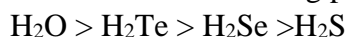
Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

56. Given below are two statements:

Statement I: The boiling point of hydrides of Group 16 elements follow the order



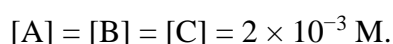
Statement II: On the basis of molecular mass, H_2O is expected to have lower boiling point than the other members of the group but due to the presence of extensive H-bonding in H_2O , it has higher boiling point.

In the light of the above statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true. (2) Both Statement I and Statement II are false.
(3) Statement I is true but Statement II is false. (4) Statement I is false but Statement II is true.

Ans: 1

57. For the reaction $2\text{A} \rightleftharpoons \text{B} + \text{C}$, $K_c = 4 \times 10^{-3}$. At a given time, the composition of reaction mixture is:



Then, which of the following is correct?

- (1) Reaction is at equilibrium.
(2) Reaction has a tendency to go in forward direction.
(3) Reaction has a tendency to go in backward direction.
(4) Reaction has gone to completion in forward direction.

Ans: 3

$$Q_c = \frac{[\text{B}][\text{C}]}{[\text{A}]^2} = 1$$

58. Activation energy of any chemical reaction can be calculated if one knows the value of

- (1) rate constant at standard temperature.
(2) probability of collision.
(3) orientation of reactant molecules during collision.
(4) rate constant at two different temperatures.

Ans: 4

$$\log \frac{k_2}{k_1} = \frac{E_a}{2.303R} \left[\frac{T_2 - T_1}{T_1 T_2} \right]$$

59. Given below are two statements:

Statement I: Both $[\text{Co}(\text{NH}_3)_6]^{3+}$ and $[\text{CoF}_6]^{3-}$ complexes are octahedral but differ in their magnetic behaviour.

Statement II: $[\text{Co}(\text{NH}_3)_6]^{3+}$ is diamagnetic whereas $[\text{CoF}_6]^{3-}$ is paramagnetic.

In the light of the above statements, choose the correct answer from the options given below:

- (1) Both Statement I and Statement II are true. (2) Both Statement I and Statement II are false.
(3) Statement I is true but Statement II is false. (4) Statement I is false but Statement II is true.

Ans: 1



CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

60. The highest number of helium atoms is in

- (1) 4 mol of helium (2) 4 u of helium
(3) 4 g of helium (4) 2.271098 L of helium at STP

Ans: 1

4 mol – $4 \times 6.022 \times 10^{23}$ He atoms

4 u – one He atoms

4 g – 1 mol = 6.022×10^{23} He atoms

2.27 L = 0.1 mol He atoms

61. Arrange the following elements in increasing order of first ionization enthalpy:

Li, Be, B, C, N

Choose the correct answer from the options given below:

- (1) Li < Be < B < C < N (2) Li < B < Be < C < N
(3) Li < Be < C < B < N (4) Li < Be < N < B < C

Ans: 2

62. Which one of the following alcohols reacts instantaneously with Lucas reagent?

- (1) $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2\text{OH}$ (2) $\text{CH}_3 - \text{CH}_2 - \underset{\text{CH}_3}{\text{CH}} - \text{OH}$
(3) $\text{CH}_3 - \underset{\text{CH}_3}{\text{CH}} - \text{CH}_2\text{OH}$ (4) $\text{CH}_3 - \underset{\text{CH}_3}{\overset{\text{CH}_3}{\text{C}}} - \text{OH}$

Ans: 4

Tertiary alcohol reacts faster with Lucas reagent

63. 'Spin only' magnetic moment is same for which of the following ions?

- A. Ti^{3+} B. Cr^{2+} C. Mn^{2+}
D. Fe^{2+} D. Sc^{3+}

Choose the most appropriate answer form the options given below:

- (1) B and D only (2) A and E only (3) B and C only (4) A and D only

Ans: 1

$\text{Ti}^{3+} = 3d^1 = 1$ unpaired electron

$\text{Cr}^{2+} = 3d^4 = 4$ unpaired electrons

$\text{Mn}^{2+} = 3d^5 = 5$ unpaired electrons

$\text{Fe}^{2+} = 3d^6 = 4$ unpaired electrons

$\text{Sc}^{3+} = 3d^0 = 0$ unpaired electrons



CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

64. The reagents with which glucose does not react to give the corresponding tests/products are

- A. Tollen's reagent
- B. Schiff's reagent
- C. HCN
- D. NH_2OH
- E. NaHSO_3

Choose the correct options from the given below:

- (1) B and C (2) A and D (3) B and E (4) E and D

Ans: 3

65. Given below are two statements:

Statement I: Aniline does not undergo Friedel-Crafts alkylation reaction.

Statement II: Aniline cannot be prepared through Gabriel synthesis.

In the light of the above statements, choose the correct answer form the options given below:

- (1) Both Statement I and Statement II are true.
- (2) Both Statement I and Statement II are false.
- (3) Statement I is correct but Statement II is false.
- (4) Statement I is incorrect but Statement II is true.

Ans: 1

66. The energy of an electron in the ground state ($n = 1$) for He^+ ion is $-x$ J, then that for an electron in $n = 2$ state for Be^{3+} ion in J is:

- (1) $-x$ (2) $-\frac{x}{9}$ (3) $-4x$ (4) $-\frac{4}{9}x$

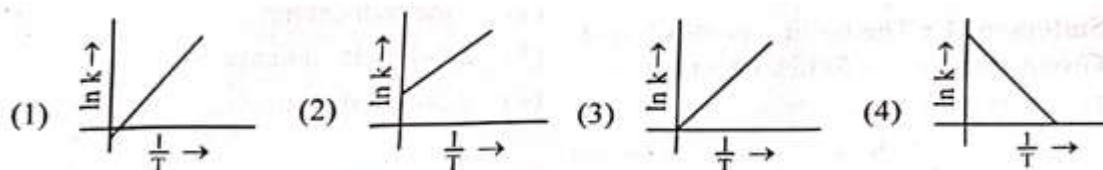
Ans: 1

$$E \propto \frac{Z^2}{n^2}$$

$$-x \propto \frac{2^2}{1^2} \dots (i) \quad E \propto \frac{4^2}{2^2} \dots (ii)$$

$$\frac{-x}{E} = \frac{1}{16} = 1 \quad E = -x$$

67. Which plot of $\ln k$ vs $\frac{1}{T}$ is consistent with Arrhenius equation?



Ans: 4



CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

68. Given below are two statements:

Statement I: The boiling point of the three isomeric pentanes follows the order
n-pentane > isopentane > neopentane

Statement II: When branching increases, the molecular attains a shape of sphere. This results smaller surface area for contact, due to which the intermolecular forces between the spherical molecules are weak, thereby lowering the boiling point.

In the light of the above statements, choose the correct answer form the options given below:

- (1) Both Statement I and Statement II are correct.
- (2) Both Statement I and Statement II are incorrect.
- (3) Statement I is correct but Statement II is incorrect.
- (4) Statement I is incorrect but Statement II is correct.

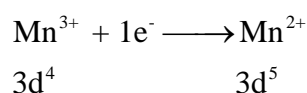
Ans: 1

Boiling point of isomeric alkanes $\propto \frac{1}{\text{Branching}}$

69. The E° value of the $\text{Mn}^{3+}/\text{Mn}^{2+}$ couple is more positive than that of $\text{Cr}^{3+}/\text{Cr}^{2+}$ or $\text{Fe}^{3+}/\text{Fe}^{2+}$ due to change of

- (1) d^5 to d^4 configuration
- (2) d^5 to d^2 configuration
- (3) d^4 to d^5 configuration
- (4) d^3 to d^5 configuration

Ans: 3



70. In which of the following processes entropy increases?

- A. A liquid evaporates to vapour.
- B. Temperature of a crystalline solid lowered from 130 K to 0 K.
- C. $2\text{NaHCO}_{3(s)} \rightarrow \text{Na}_2\text{CO}_{3(s)} + \text{CO}_{2(g)} + \text{H}_2\text{O}_{(g)}$
- D. $\text{Cl}_{2(g)} \rightarrow 2\text{Cl}_{(g)}$

Choose the correct answer from the options given below:

- (1) A and C
- (2) A, B and D
- (3) A, C and D
- (4) C and D

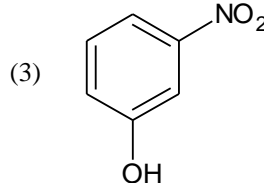
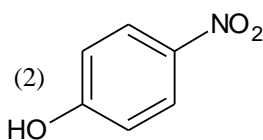
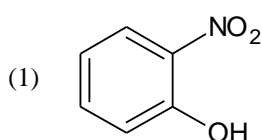
Ans: 3

A – liquid evaporates to vapour, entropy increases

B – temperature of crystalline solid 130 K to 0 K, entropy decreases

C, D – products have more number of gas molecules than reactants, entropy increases

71. Intramolecular hydrogen bonding is present in



(4) HF



CREATIVE NEET ACADEMY

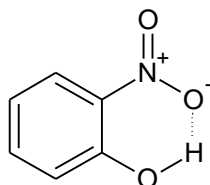
Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

Ans: 1



intramolecular hydrogen bonding

72. Arrange the following elements in increasing order of electronegativity:

N, O, F, C, Si

Choose the correct answer from the options given below:

(1) $\text{Si} < \text{C} < \text{N} < \text{O} < \text{F}$

(2) $\text{Si} < \text{C} < \text{O} < \text{N} < \text{F}$

(3) $\text{O} < \text{F} < \text{N} < \text{C} < \text{Si}$

(4) $\text{F} < \text{O} < \text{N} < \text{C} < \text{Si}$

Ans: 1

Across the period electronegativity increases

73. Which reaction is NOT a redox reaction?

(1) $\text{Zn} + \text{CuSO}_4 \rightarrow \text{ZnSO}_4 + \text{Cu}$

(2) $2\text{KClO}_3 + \text{I}_2 \rightarrow 2\text{KIO}_3 + \text{Cl}_2$

(3) $\text{H}_2 + \text{Cl}_2 \rightarrow 2\text{HCl}$

(4) $\text{BaCl}_2 + \text{Na}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + 2\text{NaCl}$

Ans: 4

$\overset{+2}{\text{Ba}}\text{Cl}_2 + \text{Na}_2\overset{+6}{\text{S}}\text{O}_4 \rightarrow \overset{+2}{\text{Ba}}\overset{+6}{\text{S}}\text{O}_4 + 2\text{NaCl}$ there is no change in oxidation number

74. Match List I with List II.

List I (Conversion)	List II (Number of Faraday required)
A. 1 mol of H_2O to O_2	I. 3F
B. 1 mol of MnO_4^- to Mn^{2+}	II. 2F
C. 1.5 mol of Ca from molten CaCl_2	III. 1F
D. 1 mol of FeO to Fe_2O_3	IV. 5F

Choose the correct answer from the options given below:

(1) A – II, B – IV, C – I, D – III

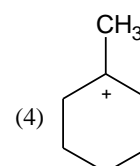
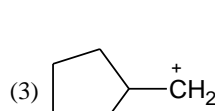
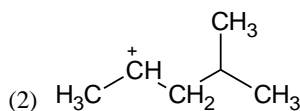
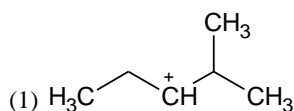
(2) A – III, B – IV, C – I, D – II

(3) A – II, B – III, C – I, D – IV

(4) A – IIT, B – IV, C – II, D – I

Ans: 1

75. The most stable carbocation among the following is:





CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

Ans: 4

Tertiary carbocation is more stable

76. Match List I with List II.

List I (Molecule)	List II (Number and types of bond/s between two carbon atoms)
A. ethane	I. one σ - bond and two π - bonds
B. ethene	II. two π - bonds
C. carbon molecule, C_2	III. one σ - bond
D. ethyne	IV. one σ - bond and one π - bonds

Choose the correct answer from the options given below:

(1) A – I, B – IV, C – II, D – III

(2) A – IV, B – III, C – II, D – I

(3) A – III, B – IV, C – II, D – I

(4) A – III, B – IV, C – I, D – II

Ans: 3

77. Among Group 16 element, which one does NOT show – 2 oxidation state?

(1) O

(2) Se

(3) Te

(4) Po

Ans: 4

Down the group electropositive nature increases

78. The Henry's law constant (K_H) values of three gases (A, B, C) in water are 145, 2×10^{-5} and 35 kbar, respectively. The solubility of these gases in water follows the order:

(1) $B > A > C$

(2) $B > C > A$

(3) $A > C > B$

(4) $A > B > C$

Ans: 2

solubility of gases in water $\propto \frac{1}{K_H}$

79. Fehling's solution 'A' is

(1) aqueous copper sulphate

(2) alkaline copper sulphate

(3) alkaline solution of sodium potassium tartrate (Rochelle's salt)

(4) aqueous sodium citrate

Ans: 1



80. Match List I with List II.

List I (Reaction)	List II (Reagents/Condition)
A.	I.
B.	II. CrO_3
C.	III. $\text{KMnO}_4/\text{KOH}, \Delta$
D.	IV. (i) O_3 (ii) $\text{Zn-H}_2\text{O}$

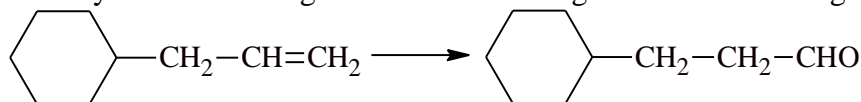
Choose the correct answer from the options given below:

- (1) A - IV, B - I, C - III, D - II (2) A - III, B - I, C - II, D - IV
(3) A - IV, B - I, C - II, D - III (4) A - I, B - IV, C - II, D - III

Ans: 3

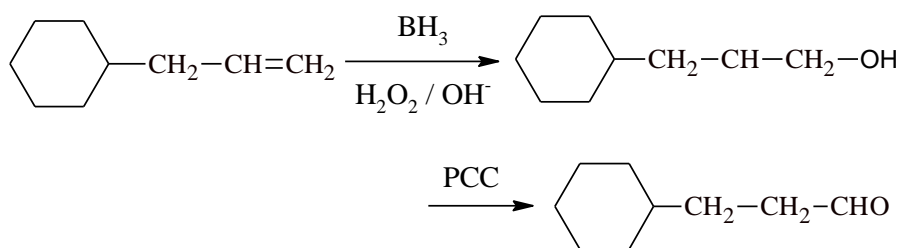
CREATIVE
EDUCATION FOUNDATION MOOBBIDRI (R)

81. Identify the correct reagents that would bring about the following transformation.



- (1) (i) $\text{H}_2\text{O}/\text{H}^+$ (ii) CrO_3 (2) (i) BH_3 (ii) $\text{H}_2\text{O}_2/\bar{\text{O}}\text{H}$ (iii) PCC
(3) (i) BH_3 (ii) $\text{H}_2\text{O}_2/\bar{\text{O}}\text{H}$ (iii) alk. KMnO_4 (iv) $\text{H}_3\text{O}^{\oplus}$ (4) (i) $\text{H}_2\text{O}/\text{H}^+$ (ii) PCC

Ans: 2





CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

82. Match List I with List II.

List I Quantum Number	List II Information provided
A. m_l	I. shape of orbital
B. m_s	II. size of orbital
C. l	III. orientation of orbital
D. n	IV. orientation of spin of electron

Choose the correct answer from the options given below:

- (1) A – I, B – III, C – II, D – IV (2) A – III, B – IV, C – I, D – II
(3) A – III, B – IV, C – II, D – I (4) A – II, B – I, C – IV, D – III

Ans: 2

83. Match List I with List II.

List I (Compound)	List II (Shape/geometry)
A. NH_3	I. Trigonal Pyramidal
B. BrF_5	II. Square Planar
C. XeF_4	III. Octahedral
D. SF_6	IV. Square Pyramidal

Choose the correct answer from the options given below:

- (1) A – I, B – IV, C – II, D – III (2) A – II, B – IV, C – III, D – I
(3) A – III, B – IV, C – I, D – II (4) A – II, B – III, C – IV, D – I

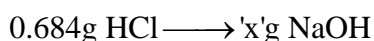
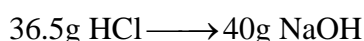
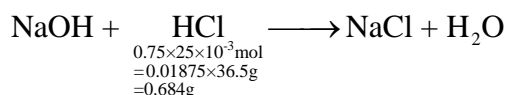
Ans: 1

A. NH_3	3 b.p + 1 l.p	Trigonal Pyramidal
B. BrF_5	5 b.p + 1 l.p	Square Pyramidal
C. XeF_4	4 b.p + 2 l.p	Square Planar
D. SF_6	6 b.p + 0 l.p	Octahedral

84. 1 gram of sodium hydroxide was treated with 25 mL of 0.75M HCl solution, the mass of sodium hydroxide left unreacted is equal to

- (1) 750 mg (2) 250 mg (3) Zero mg (4) 200 mg

Ans: 2



$$x = 0.7495$$

$$\text{NaOH left unreacted} = 1 \text{ g} - 0.7495 \text{ g} = 0.2505 \text{ g} = 250 \text{ mg}$$



CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

85. Match List I with List II.

List I (Complex)	List II (Type of isomerism)
A. $[\text{Co}(\text{NH}_3)_5(\text{NO}_2)]\text{Cl}_2$	I. Solvent isomerism
B. $[\text{Co}(\text{NH}_3)_5(\text{SO}_4)]\text{Br}$	II. Linkage isomerism
C. $[\text{Co}(\text{NH}_3)_6] [\text{Cr}(\text{CN})_6]$	III. Ionization isomerism
D. $[\text{Co}(\text{H}_2\text{O})_6]\text{Cl}_3$	IV. Coordination isomerism

Choose the correct answer from the options given below:

(1) A – II, B – III, C – IV, D – I

(2) A – I, B – III, C – IV, D – II

(3) A – II, B – IV, C – III, D – II

(4) A – II, B – IV, C – III, D – I

Ans: 1

SECTION – B (Q. No. 86 to 100)

86. During the preparation of Mohr's salt solution (Ferrous ammonium sulphate), which of the following acid is added to prevent hydrolysis of Fe^{2+} ion?

(1) dilute hydrochloric acid

(2) concentrated sulphuric acid

(3) dilute nitric acid

(4) dilute sulphuric acid

Ans: 4

To prevent the hydrolysis of Fe^{2+} ion.

87. Given below are certain cations. Using the inorganic qualitative analysis, arrange them in increasing group number from 0 to VI.

A. Al^{3+}

B. Cu^{2+}

C. Ba^{2+}

D. Co^{2+}

E. Mg^{2+}

Choose the correct answer from the options given below:

(1) B, A, D, C, E

(2) B, C, A, D, E

(3) E, C, D, B, A

(4) E, A, B, C, D

Ans: 1

Group II – Cu^{2+}

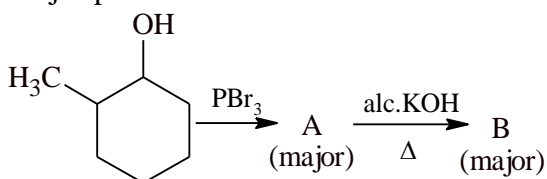
Group III – Al^{3+}

Group IV – Co^{2+}

Group V – Ba^{2+}

Group VI – Mg^{2+}

88. Major products A and B formed in the following reaction sequence, are





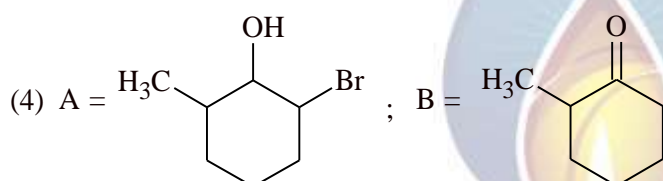
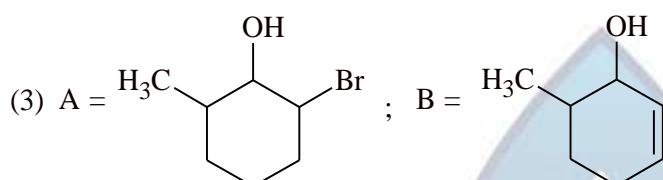
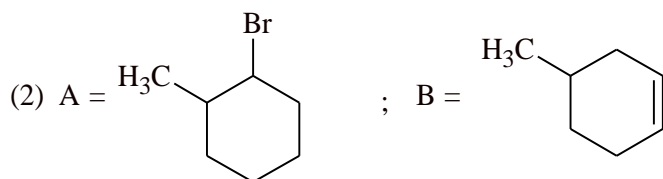
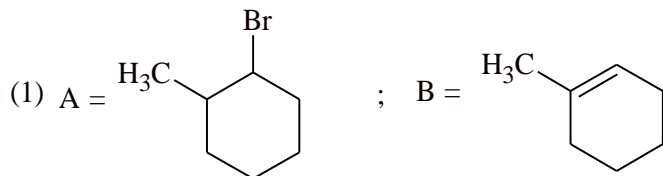
CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

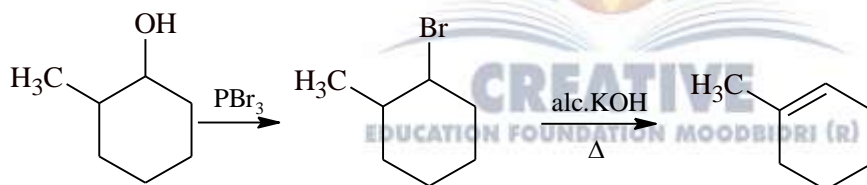
Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY



Ans: 1



89. The pair of lanthanoid ions which are diamagnetic is

- (1) Ce^{4+} and Yb^{2+} (2) Ce^{3+} and Eu^{2+} (3) Gd^{3+} and Eu^{3+} (4) Pm^{3+} and Sm^{2+}

Ans: 1

Ce^{4+} - $[Xe] 4f^0 5d^0 6s^0$

Yb^{2+} - $[Xe] 4f^{14}$

Both does not have unpaired electrons

90. Identify the correct answer

- (1) three resonance structures can be drawn for ozone,
(2) BF_3 has non zero dipole moment
(3) dipole moment of NF_3 is greater than NH_3
(4) three canonical forms can be drawn for CO_3^{2-} ion.

Ans: 4



CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

91. A compound X contains 32% of A, 20% of B and remaining percentage of C. then, the empirical formula X is [Given atomic masses of A = 64, B = 40, C = 32 u]

(1) A_2BC_2

(2) ABC_3

(3) AB_2C_2

(4) ABC_4

Ans: 2

$$A = \frac{32}{64} = 0.5 \quad \frac{0.5}{0.5} = 1$$

$$B = \frac{20}{40} = 0.5 \quad \frac{0.5}{0.5} = 1$$

$$C = \frac{48}{32} = 1.5 \quad \frac{1.5}{0.5} = 3$$

$\therefore ABC_3$

92. The work done during reversible isothermal expansion of one mol of Hydrogen gas 25°C from pressure of 20 atmosphere to 10 atmosphere is. Given, $R = 2.0 \text{ CalK}^{-1}\text{mol}^{-1}$.

(1) 0 Calorie

(2) -413.14 Calories

(3) 413.14 Calories

(4) 100 calories

Ans: 2

$$w = -2.303RT \log \frac{P_1}{P_2}$$

93. Mass in grams of Copper deposited by passing 9.6487 A current for 100 seconds is?

(Given: Molar mass of Cu = 63 gmol^{-1} , $1F = 96487 \text{ C}$)

(1) 3.15 g

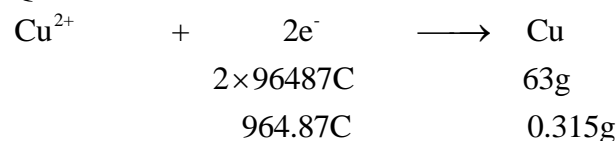
(2) 0.315 g

(3) 31.5 g

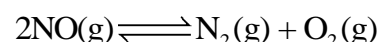
(4) 0.0315 g

Ans: 2

$$Q = I \times t = 9.6487 \text{ A} \times 100 \text{ s} = 964.87 \text{ C}$$



94. Consider the following reaction in a sealed vessel at equilibrium with concentrations of $\text{N}_2 = 3.0 \times 10^{-3} \text{ M}$, $\text{O}_2 = 4.2 \times 10^{-3} \text{ M}$ and $\text{NO} = 2.8 \times 10^{-3} \text{ M}$.



If 0.1 molL^{-1} of $\text{NO}(\text{g})$ is taken in a closed vessel, what will be degree of dissociation (α) of $\text{NO}(\text{g})$ at equilibrium?

(1) 0.00889

(2) 0.0889

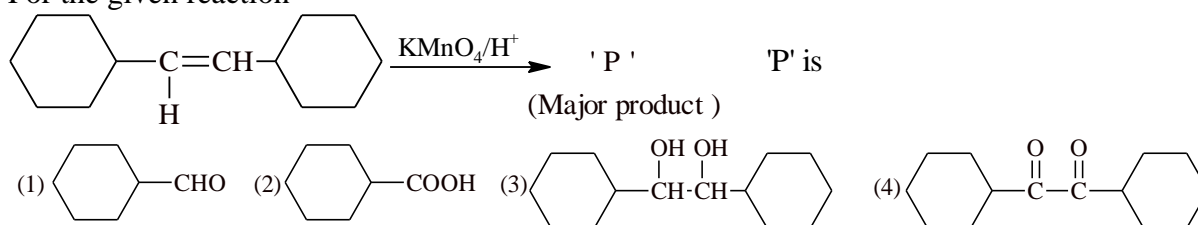
(3) 0.8889

(4) 0.717

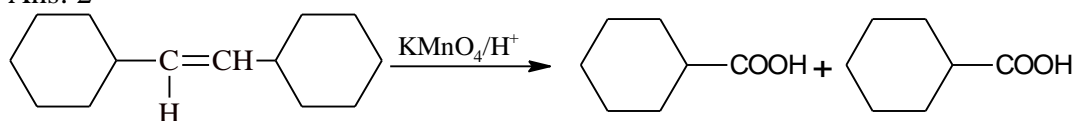
Ans: 3



95. For the given reaction



Ans: 2



96. The rate of a reaction quadruples when temperature changes from 27°C to 57°C. calculate the energy of activation.

(Given, $R = 8.314 \text{ JK}^{-1}\text{mol}^{-1}$, $\log 4 = 0.6021$)

- (1) 38.04 kJmol^{-1} (2) 380.4 kJmol^{-1} (3) 3.80 kJmol^{-1} (4) 3804 kJmol^{-1}

Ans: 1

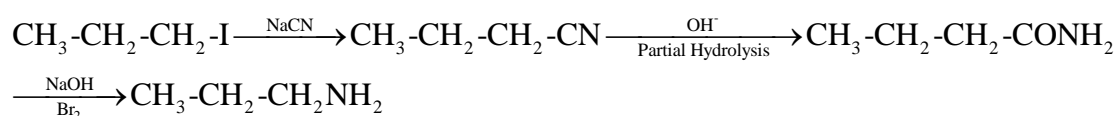
$$\log \frac{k_2}{k_1} = \frac{E_a}{2.303R} \left[\frac{T_2 - T_1}{T_1 T_2} \right]$$

97. Identify the major product C formed in the following reaction sequence

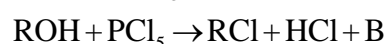
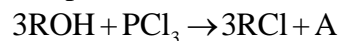


- (1) Propylamine (2) Butylamine (3) Butanamide (4) α -Bromobutanoic acid

Ans: 1

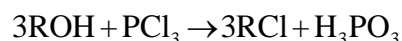


98. The products A and B obtained in the following reaction, respectively, are



- (1) POCl_3 and H_3PO_3 (2) POCl_3 and H_3PO_4
 (3) H_3PO_4 and POCl_3 (4) H_3PO_3 and POCl_3

Ans: 4



99. The plot of osmotic pressure (π) vs concentration (molL^{-1}) for a solution gives a straight line with slope 25.73 L bar mol^{-1} . The temperature at which the osmotic pressure measurement is done is:

(Use $R = 0.083 \text{ L bar mol}^{-1} \text{ K}^{-1}$)



CREATIVE NEET ACADEMY

Sapthagiri Campus, Kanangi Road, Hirgana, Karkala - 576 117

Ph: +91 96069 06466 Email: neet@creativeedu.in

NEET (UG)-2024 (Code - Q2)

CHEMISTRY

- (1) 37°C (2) 310°C (3) 25.73°C (4) 12.05°C

Ans: 1

WKT $\pi = cRT$

$$y = x(m)$$

$$m = RT$$

$$25.73 = 0.083 T$$

$$T = 310 \text{ K}$$

$$\therefore T = 37^\circ\text{C}$$

100. Given below are two statements:

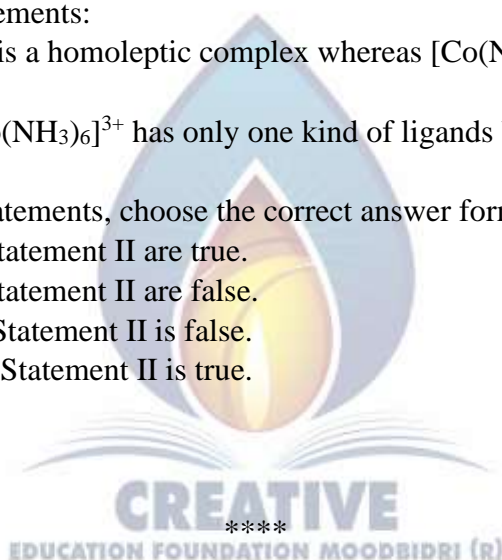
Statement I: $[\text{Co}(\text{NH}_3)_6]^{3+}$ is a homoleptic complex whereas $[\text{Co}(\text{NH}_3)_4\text{Cl}_2]^+$ is a heteroleptic complex.

Statement II: Complex $[\text{Co}(\text{NH}_3)_6]^{3+}$ has only one kind of ligands but $[\text{Co}(\text{NH}_3)_4\text{Cl}_2]^+$ has more than one kind of ligand.

In the light of the above statements, choose the correct answer form the options given below:

- (1) Both Statement I and Statement II are true.
(2) Both Statement I and Statement II are false.
(3) Statement I is true but Statement II is false.
(4) Statement I is false but Statement II is true.

Ans: 1



DEPARTMENT OF CHEMISTRY

CREATIVE EDUCATION FOUNDATION MOODBIDRI (R)

Website : www.creativeedu.in

Phone No. : +91 9019844492